

REMARKS

Initially, in the Office Action dated August 17, 2004, the Examiner rejects claims 1, 8 and 10 under 35 U.S.C. §112, first paragraph. Claims 1-6 and 8-10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,462,579 (McKinsey) in view of U.S. Patent No. 6,631,518 (Bortnikov et al.).

By the present Amendment, Applicants have amended claim 1 and 8-10 to further clarify the invention. Claims 1-6 and 8-10 remain pending in the present application.

35 U.S.C. §112 Rejections

Claims 1, 8 and 10 have been rejected under 35 U.S.C. §112, first paragraph. Applicants have amended these claims to further clarify the invention and respectfully request that these rejections be withdrawn.

35 U.S.C. §103 Rejections

Claims 1-6 and 8-10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over McKinsey in view of Bortnikov et al. Applicants have discussed the deficiencies of these references in Applicants' previously-filed response and reassert all arguments submitted in that response. Applicants provide the following additional remarks.

Regarding claims 1 and 8-10, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of these claims of, inter alia, performing loop duplication during compiling operation to generate first and second loops for a repetitively executed fragment of a source program, or generating object

codes that perform a control transfer of execution from the first loop to the second loop based on a predetermined condition or value. These limitations are supported in Applicants' disclosure and Fig 7. As has been noted previously, McKinsey merely discloses compiling source code where a compiler generates immediate code from the source code, generates object code instructions from the intermediate code and schedules the object code instructions. Moreover, Bortnikov et al. merely discloses a profiling system wherein profile data is stored in a separable hierarchical fashion such that profile data for each compile procedure in a computer program can be readily identified and utilized. Applicants submit that the cited references do not disclose or suggest anything related to performing loop-duplication during compiling operations or generating first and second loops for a repetitively executed fragment of a source program, as recited in the claims of the present application. Further, Applicants submit that none of the cited references disclose or suggest generating first object codes using speculation mechanism as a first loop, generating second object codes not using the speculation mechanism as the second loop, or generating object codes that perform a control transfer of execution from the first loop to the second loop.

Regarding claims 2-6, Applicants submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted regarding this independent claim. For example, none of the cited references disclose or suggest where the predetermined condition is a ratio of the number of times a speculation failure is detected by the speculation check to a number of times

the repetitively executed program fragment is executed exceeds a predetermined value.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 1-6 and 8-10 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-6 and 8-10 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 500.40122X00).

Respectfully submitted,

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